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System Architecture

Frontend Layer (Client-Side)

- Technology: React with Axios
- Responsibility: The React frontend is responsible for rendering the UI and handling
 user interactions. Axios, a promise-based HTTP client, is used for making HTTP
 requests to the backend server. Axios simplifies handling request and response
 interceptors, transforming request and response data, and managing session
 timeouts.
- Communication: Axios sends asynchronous HTTP requests to the backend for data operations. For file operations (upload/download), it may interact with Firebase Storage directly if necessary, although this is often handled through native file API and Firebase SDKs.

Backend Layer (Server-Side)

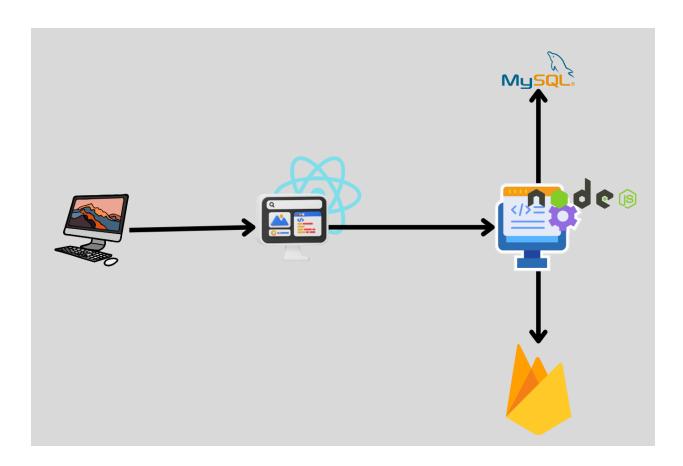
- **Technology:** Node.js with Sequelize ORM
- Responsibility: The Node.js backend implements application logic, processes
 client requests, and manages database operations. Sequelize ORM is used to
 abstract the database layer, allowing developers to write database queries using
 JavaScript instead of SQL, which can help prevent SQL injection attacks and
 improve code maintainability.
- Communication: The backend receives API calls from the frontend (via Axios),
 processes these requests (e.g., user authentication, data processing, validation),
 and uses Sequelize to perform database operations. The use of Sequelize facilitates
 connections to MySQL hosted on AWS RDS through a secure and manageable
 interface, leveraging RDS's scalability and security features.

System Design

- **User Interface (React + Axios):** Provides a dynamic and interactive user experience, using Axios for efficient and flexible communication with the backend.
- Application Server (Node.js + Sequelize): Manages core application logic, authentication, and data processing. Sequelize ORM streamlines database interactions with MySQL on AWS RDS, supporting complex queries, transactions, and data mapping with improved security and developer productivity.

- Database (MySQL on AWS RDS): Remains the central repository for storing application data. Sequelize enhances interaction with the database by providing a high-level API for CRUD operations, migrations, and more.
- File Storage (Firebase Storage): Direct interaction from the frontend for file
 uploads and downloads, reducing latency and server load. Backend may interact for
 file management tasks or to generate secure access URLs using Firebase Admin
 SDK if needed.

This detailed architecture aims to utilize the strengths of each technology (React, Axios, Node.js, Sequelize, MySQL on AWS RDS, and Firebase Storage) to create a scalable, secure, and maintainable web application. Ensuring proper implementation of security best practices, such as secure HTTPS communications, proper authentication and authorization checks, validation and sanitization of inputs, and secure handling of files, is paramount to protecting the application and its users.



API DOCUMENTATION

Authentication

Register User

```
This API creates new user in the system
```

```
URL: POST - BASE URL/auth/register
```

```
SAMPLE-DATA:
```

```
{
    "userName": "testusername",
    "imageURL": "test url",
    "email": "test@test.com",
    "phoneNumber": "testPhonenumber",
    "password": "test password",
    "address": "test address"
}
SAMPLE-REPONSE:
{
    "status": 200,
    "message": "user registered successfully!!!"
}
```

Login

This API lets user login to the system

```
URL: POST - BASE URL/auth/login
```

SAMPLE-DATA:

```
{
    "email": "test@test.com",
    "password": "test password"
}
SAMPLE-RESPONSE:
{
    "message": "Login successful!",
    "token":
```

"eyJhbGciOiJIUzI1NiIsInR5cCl6IkpXVCJ9.eyJ1dWlkljoiNmVkMDdmNTctNzY5MS00ZDQyLWE1YWEtOGZINjJIMjVhNjQxIiwiaWF0IjoxNzEyNDEwMTQyLCJIeHAiOjE3MTI0MTE5NDJ9.FrbYIZXr9J-

NSvkMdEX_khFG_rVRhsS1sQowAijlfaY",

[&]quot;refreshToken"

[&]quot;eyJhbGciOiJIUzI1NiIsInR5cCl6IkpXVCJ9.eyJ1dWlkIjoiNmVkMDdmNTctNzY5MS00ZDQyLWE1YWEtOGZINjJIMjVh

```
NjQxliwiaWF0ljoxNzEyNDEwMTQyLCJleHAiOjE3MTl0OTY1NDJ9.oPMt6ewqola-line for the control of the c
5gEZFIFWvIS_GX81Vo4PPzqGHvcUJ7s",
           "user": {
                    "uuid": "6ed07f57-7691-4d42-a5aa-8fe62e25a641",
                    "userName": "testusername",
                    "imageURL": "test url",
                    "email": "test2@test.com",
                    "phoneNumber": "testPhonenumber",
                    "address": "test address",
                    "isAdmin": true,
                    "isSuperAdmin": false,
                    "refreshToken":
"eyJhbGciOiJIUzI1NiIsInR5cCl6lkpXVCJ9.eyJ1dWlkljoiNmVkMDdmNTctNzY5MS00ZDQyLWE1YWEtOGZINjJIMjVh
NjQxliwiaWF0ljoxNzEyNDEwMTQyLCJleHAiOjE3MTl0OTY1NDJ9.oPMt6ewqola-
5gEZFIFWvIS_GX81Vo4PPzqGHvcUJ7s"
        }
}
```

Logout

This API logs out the user from the system

URL: POST - BASE URL/auth/logout

Job

Add Job

```
This api adds a new job posting to the system
```

```
URL: POST - BASE_URL/api/jobs
```

```
SAMPLE-DATA:
```

```
"institutionName": "testname2",
   "imageURL": "",
   "post": "testpost",
   "level": "",
   "vacancy": 2,
   "type": "testtype",
   "salary": 1222,
   "deadline": "2024-10-11",
   "state": "OH",
   "city": "test city",
   "venue": "test venue",
   "education": "test education",
   "experience": "test experience",
   "specifications": "test specifications, fwejhrf,fewf",
   "description": "test description, ejfhef,"
}
```

SAMPLE-RESPONSE:

```
"message": "Job created successfully",
"job": {
  "uuid": "0be77d95-a6db-4fb2-8b6c-4bc2228311fd",
  "institutionName": "testname2",
  "imageURL": "",
  "post": "testpost",
  "level": "",
  "vacancy": 2,
  "type": "testtype",
  "salary": 1222,
  "deadline": "2024-10-11T00:00:00.000Z",
  "state": "OH",
  "city": "test city",
  "venue": "test venue",
  "education": "test education",
  "experience": "test experience",
  "specifications": "test specifications, fwejhrf,fewf",
```

Update job

This API updates a job posting in the system

URL: PUT - BASE_URL /api/jobs/1354ca10-5f99-489e-8148-24ba543e51fe (uuid of job)

```
SAMPLE-DATA:
```

```
"institutionName": "testname updated3",
  "post": "testpost updated",
  "level": "testlevel",
  "vacancy": 2,
  "type": "testtype",
  "salary": 1222,
  "deadline": "2024-10-1",
  "state": "OH",
  "city": "test city updated",
  "venue": "test venue",
  "education": "test education",
  "experience": "test experience",
  "specifications": "test specifications",
  "description": "test description"
}
```

SAMPLE-REPONSE:

```
"message": "Job updated successfully",

"udpatedJob": {

"uuid": "0be77d95-a6db-4fb2-8b6c-4bc2228311fd",

"institutionName": "updated testname2",

"imageURL": "",

"post": "testpost",

"level": "",

"vacancy": 2,

"type": "testtype",

"salary": 1222,

"deadline": "2024-10-11T00:00:00.000Z",

"state": "OH",
```

```
"city": "test city",
    "venue": "test venue",
    "education": "test education",
    "experience": "test experience",
    "specifications": "test specifications, fwejhrf,fewf",
    "description": "test description, ejfhef,",
    "createdAt": "2024-04-09T04:51:53.000Z",
    "updatedAt": "2024-04-09T04:53:49.000Z"
}
```

Fetch All Jobs

This api fetches all the job postings in the system

URL: GET - BASE URL/api/jobs (fetches all jobs)

SAMPLE-REPONSE:

```
"uuid": "bc935f5d-4d2b-40d1-b731-79914bdbb5d2",
  "institutionName": "testname2",
  "imageURL": "",
  "post": "testpost",
  "level": "",
  "vacancy": 2,
  "type": "testtype",
  "salary": 1222,
  "deadline": "2024-10-11T00:00:00.000Z",
  "state": "OH",
  "city": "test city",
  "venue": "test venue",
  "education": "test education",
  "experience": "test experience",
  "specifications": "test specifications",
  "description": "test description",
  "createdAt": "2024-03-23T21:21:33.000Z",
  "updatedAt": "2024-03-23T21:21:33.000Z"
},
  "uuid": "9407e32d-5032-4bb6-ab71-48a7f8222d09",
  "institutionName": "testname2",
  "imageURL": "",
  "post": "testpost",
  "level": "",
  "vacancy": 2,
  "type": "testtype",
```

```
"deadline": "2024-10-11T00:00:00.000Z",
     "state": "OH",
     "city": "test city",
     "venue": "test venue",
     "education": "test education",
     "experience": "test experience",
     "specifications": "test specifications, fwejhrf,fewf",
     "description": "test description, ejfhef,",
     "createdAt": "2024-04-09T04:46:11.000Z",
     "updatedAt": "2024-04-09T04:46:11.000Z"
  },
     "uuid": "0be77d95-a6db-4fb2-8b6c-4bc2228311fd",
     "institutionName": "updated testname2",
     "imageURL": "",
     "post": "testpost",
     "level": "",
     "vacancy": 2,
     "type": "testtype",
     "salary": 1222,
     "deadline": "2024-10-11T00:00:00.000Z",
     "state": "OH",
     "city": "test city",
     "venue": "test venue",
     "education": "test education",
     "experience": "test experience",
     "specifications": "test specifications, fwejhrf,fewf",
     "description": "test description, ejfhef,",
     "createdAt": "2024-04-09T04:51:53.000Z",
     "updatedAt": "2024-04-09T04:53:49.000Z"
  }
1
Fetch Job by ID
This api fetches a job by its uuid
URL: GET - BASE URL/api/jobs/ 0be77d95-a6db-4fb2-8b6c-4bc2228311fd
(uuid of job)
SAMPLE-REPONSE:
  "uuid": "0be77d95-a6db-4fb2-8b6c-4bc2228311fd",
  "institutionName": "updated testname2",
  "imageURL": "",
```

"salary": 1222,

```
"post": "testpost",
  "level": "",
  "vacancy": 2,
  "type": "testtype",
  "salary": 1222,
  "deadline": "2024-10-11T00:00:00.000Z",
  "state": "OH".
  "city": "test city",
  "venue": "test venue",
  "education": "test education",
  "experience": "test experience",
  "specifications": "test specifications, fwejhrf,fewf",
  "description": "test description, ejfhef,",
  "createdAt": "2024-04-09T04:51:53.000Z",
  "updatedAt": "2024-04-09T04:53:49.000Z"
}
```

Delete Job by ID

Delete

URL: DELETE - <u>BASE_URL/api/jobs/9c230f4a-93d8-4803-980c-f216247cf268</u> (uuid of job)

```
SAMPLE-REPONSE:
```

```
{
   "message": "Job deleted successfully"
}
```

Accommodation

Add Accommodation

This api adds a new accommodation posting to the system

URL: POST - BASE URL/api/accommodations

SAMPLE-DATA:

```
"roomType": "test room Type",
"imageURL": "",
"moveIn": "2024-10-11",
"rent": 1111,
"space": "",
"amenities": "",
"rules": "test rules",
```

```
"location": "test location"
}
SAMPLE-RESPONSE:
  "message": "Accommodation created successfully",
  "accommodation": {
    "uuid": "bfab7be5-fd6a-4211-8e65-df2599ee7056",
    "roomType": "test room Type",
    "imageURL": "",
    "moveln": "2024-10-11T00:00:00.000Z",
    "rent": 1111,
    "space": "",
    "amenities": "".
    "rules": "test rules",
    "location": "test location",
    "updatedAt": "2024-04-09T04:59:15.978Z",
    "createdAt": "2024-04-09T04:59:15.978Z"
  }
}
Update Accommodation
This API updates a accommodation posting in the system
URL: PUT - BASE_URL /api/jobs/1354ca10-5f99-489e-8148-24ba543e51fe (uuid of
job)
SAMPLE-DATA:
  "roomType": "test room Type update",
  "imageURL": "test update",
  "moveln": "2024-1-19",
  "rent": 1111,
  "space": "",
  "amenities": "",
  "rules": "test rules",
  "location": "test location"
}
SAMPLE-REPONSE:
  "message": "Accommodation updated successfully",
```

"udpatedAccommodation": {

```
"uuid": "bfab7be5-fd6a-4211-8e65-df2599ee7056",
    "roomType": "test room Type update",
    "imageURL": "test update",
    "moveln": "2024-01-19T05:00:00.000Z",
    "rent": 1111,
    "space": "",
    "amenities": "",
    "rules": "test rules",
    "location": "test location",
    "createdAt": "2024-04-09T04:59:15.000Z",
    "updatedAt": "2024-04-09T05:05:49.000Z"
}
```

Fetch All Accommodations

This api fetches all the accommodation postings in the system

URL: GET - BASE URL/api/accommodations (fetches all jobs)

SAMPLE-REPONSE:

```
[
     "uuid": "0e4bef60-c10c-4769-ae4c-c78317b7ebd4",
     "roomType": "test room Type",
     "imageURL": "",
     "moveln": "2024-10-11T00:00:00.000Z",
     "rent": 1111,
     "space": "",
     "amenities": "",
     "rules": "test rules",
     "location": "test location",
     "createdAt": "2024-03-26T23:10:30.000Z",
     "updatedAt": "2024-03-26T23:10:30.000Z"
  },
     "uuid": "bfab7be5-fd6a-4211-8e65-df2599ee7056",
     "roomType": "test room Type update",
     "imageURL": "test update",
     "moveln": "2024-01-19T05:00:00.000Z",
     "rent": 1111,
     "space": "",
     "amenities": "",
     "rules": "test rules",
     "location": "test location",
     "createdAt": "2024-04-09T04:59:15.000Z",
     "updatedAt": "2024-04-09T05:05:49.000Z"
```

```
}
1
```

Fetch Accommodation by ID

This api fetches a accommodation by its uuid

URL: GET - <u>BASE_URL/api/accommodations/bfab7be5-fd6a-4211-8e65-df2599ee7056</u> (uuid of accommodation)

SAMPLE-REPONSE:

```
"uuid": "bfab7be5-fd6a-4211-8e65-df2599ee7056",
"roomType": "test room Type update",
"imageURL": "test update",
"moveln": "2024-01-19T05:00:00.000Z",
"rent": 1111,
"space": "",
"amenities": "",
"rules": "test rules",
"location": "test location",
"createdAt": "2024-04-09T04:59:15.000Z",
"updatedAt": "2024-04-09T05:05:49.000Z"
```

Delete Accommodation by ID

Delete

URL: DELETE - <u>BASE_URL/api/accommodations/9c230f4a-93d8-4803-980c-f216247cf268</u> (uuid of accommodation)

SAMPLE-REPONSE:

```
{
   "message": "Accommodation deleted successfully"
}
```

Event

Add Event

```
This api adds a new event posting to the system
```

```
URL: POST - BASE URL/api/events
```

```
SAMPLE-DATA:
```

```
{
    "eventName": "testname",
    "imageURL": "",
    "eventOrganizer": "test organizer",
    "eventTag": "tag1, tag2",
    "date": "2024-10-12",
    "startTime": "22:22",
    "endTime": "22:23",
    "state": "OH",
    "city": "test city",
    "venue": "test venue",
    "description": "test description"
}
```

SAMPLE-RESPONSE:

```
"message": "Event created successfully",
  "event": {
     "uuid": "a0948032-3e7e-4ccc-947f-9071e3efc164",
     "eventName": "testname",
     "imageURL": "",
     "eventOrganizer": "test organizer",
     "eventTag": "tag1, tag2",
     "date": "2024-10-12T00:00:00.000Z",
     "startTime": "22:22",
     "endTime": "22:23",
     "state": "OH",
     "city": "test city",
     "venue": "test venue",
     "description": "test description",
     "updatedAt": "2024-04-09T05:14:22.680Z",
     "createdAt": "2024-04-09T05:14:22.680Z"
  }
}
```

Update Event

This API updates a accommodation posting in the system

URL: PUT - BASE_URL/api/events/1354ca10-5f99-489e-8148-24ba543e51fe (uuid of job)

```
SAMPLE-DATA:
```

```
{
    "eventName": "testname updated",
    "imageURL": "updated",
    "eventOrganizer": "test organizer",
    "eventTag": "tag1, tag2",
    "date": "2024-10-12",
    "startTime": "22:22",
    "endTime": "22:25",
    "state": "OH",
    "city": "test city",
    "venue": "test venue",
    "description": "test description"
}
```

SAMPLE-REPONSE:

```
"message": "Event updated successfully",
  "udpatedEvent": {
     "uuid": "a0948032-3e7e-4ccc-947f-9071e3efc164",
     "eventName": "testname updated",
     "imageURL": "updated",
     "eventOrganizer": "test organizer",
     "eventTag": "tag1, tag2",
     "date": "2024-10-12T00:00:00.000Z",
     "startTime": "22:22",
     "endTime": "22:25",
     "state": "OH",
     "city": "test city",
     "venue": "test venue",
     "description": "test description",
     "createdAt": "2024-04-09T05:14:22.000Z",
     "updatedAt": "2024-04-09T05:16:07.000Z"
  }
}
```

Fetch All Events

This api fetches all the events postings in the system

URL: GET - BASE URL/api/events (fetches all events)

SAMPLE-REPONSE:

```
[
  {
     "uuid": "a0948032-3e7e-4ccc-947f-9071e3efc164",
     "eventName": "testname updated",
     "imageURL": "updated",
     "eventOrganizer": "test organizer",
     "eventTag": "tag1, tag2",
     "date": "2024-10-12T00:00:00.000Z",
     "startTime": "22:22",
     "endTime": "22:25",
     "state": "OH",
     "city": "test city",
     "venue": "test venue",
     "description": "test description",
     "createdAt": "2024-04-09T05:14:22.000Z",
     "updatedAt": "2024-04-09T05:16:07.000Z"
  }
]
```

Fetch Event by ID

This api fetches a accommodation by its uuid

URL: GET - BASE_URL/api/events/bfab7be5-fd6a-4211-8e65-df2599ee7056

(uuid of accommodation)

SAMPLE-REPONSE:

```
{
    "uuid": "a0948032-3e7e-4ccc-947f-9071e3efc164",
    "eventName": "testname updated",
    "imageURL": "updated",
    "eventOrganizer": "test organizer",
    "eventTag": "tag1, tag2",
    "date": "2024-10-12T00:00:00:00.000Z",
    "startTime": "22:22",
    "endTime": "22:25",
    "state": "OH",
    "city": "test city",
    "venue": "test venue",
    "description": "test description",
    "createdAt": "2024-04-09T05:14:22.000Z",
    "updatedAt": "2024-04-09T05:16:07.000Z"
}
```

Delete Accommodation by ID

Delete

```
URL: DELETE - <u>BASE_URL/api/events/9c230f4a-93d8-4803-980c-f216247cf268</u> (uuid of accommodation)
```

```
SAMPLE-REPONSE:
```

```
{
   "message": "Accommodation deleted successfully"
}
```

Job Application

Create a Job Application

This api creates a job application for a user for a job

```
URL: POST - BASE URL/api/jobApplications
```

```
SAMPLE-DATA:
```

```
"job_uuid": "0be77d95-a6db-4fb2-8b6c-4bc2228311fd",
    "fileURL": "fileURL"
}
```

SAMPLE-REPONSE:

```
{
   "message": "JobApplication created successfully",
   "jobApplication": {
        "uuid": "3ea277d6-9928-4e1b-9269-b3361c54ad48",
        "job_uuid": "0be77d95-a6db-4fb2-8b6c-4bc2228311fd",
        "fileURL": "fileURL",
        "user_uuid": "6530edbb-b9e7-41ef-8aee-cbdf957f1a5e",
        "updatedAt": "2024-04-09T05:28:04.941Z",
        "createdAt": "2024-04-09T05:28:04.941Z"
    }
}
```

Get All Job Application For Job

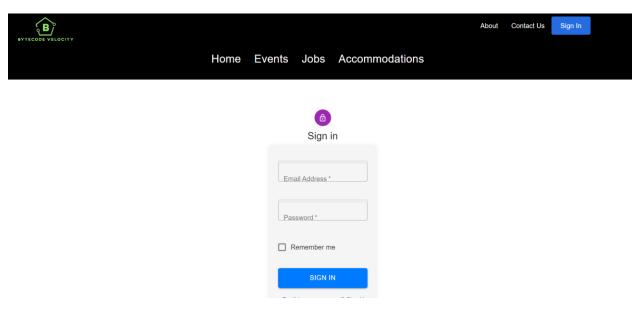
This API gets all the applications for a particular job

URL: GET - BASE_URL/api/jobApplications/job/0be77d95-a6db-4fb2-8b6c-4bc2228311fd

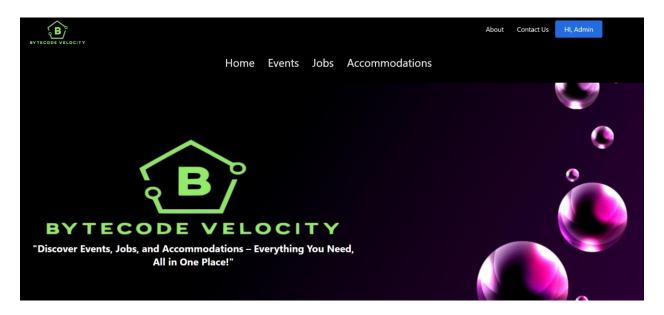
SAMPLE-RESPONSE:

```
[
    "uuid": "3ea277d6-9928-4e1b-9269-b3361c54ad48",
    "job_uuid": "0be77d95-a6db-4fb2-8b6c-4bc2228311fd",
    "user_uuid": "6530edbb-b9e7-41ef-8aee-cbdf957f1a5e",
    "fileURL": "fileURL",
    "createdAt": "2024-04-09T05:28:04.000Z",
    "updatedAt": "2024-04-09T05:28:04.000Z"
  },
    "uuid": "33458df3-a166-4727-8f44-90c85d7aa23a",
    "job_uuid": "0be77d95-a6db-4fb2-8b6c-4bc2228311fd",
    "user_uuid": "6530edbb-b9e7-41ef-8aee-cbdf957f1a5e",
    "fileURL": "fileURL2",
    "createdAt": "2024-04-09T05:30:11.000Z",
    "updatedAt": "2024-04-09T05:30:11.000Z"
  }
]
```

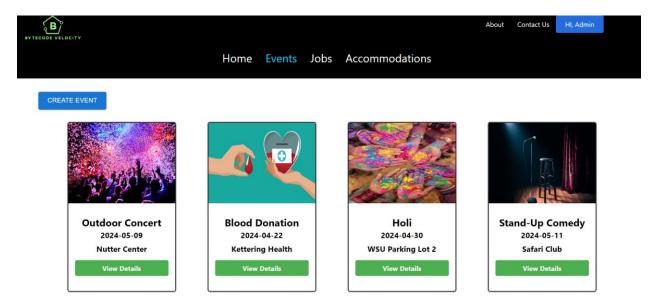
Application View



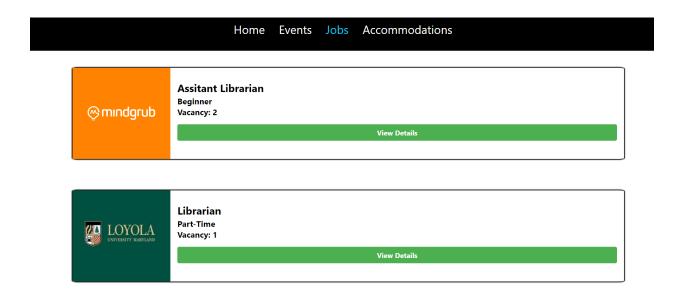
Login page



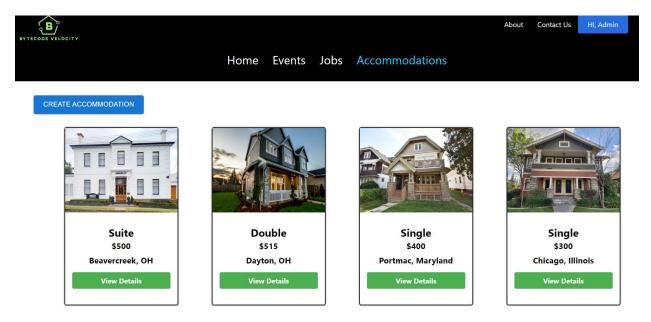
Home page



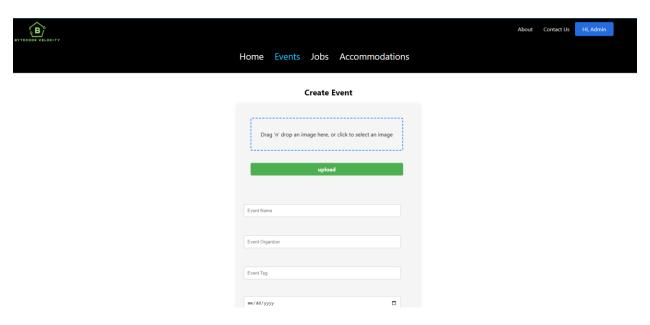
Events page



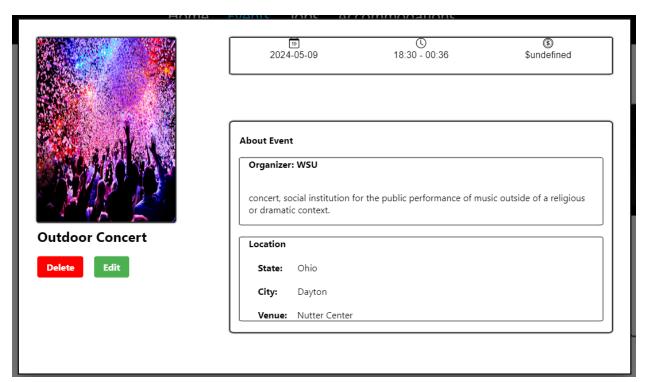
Jobs Page



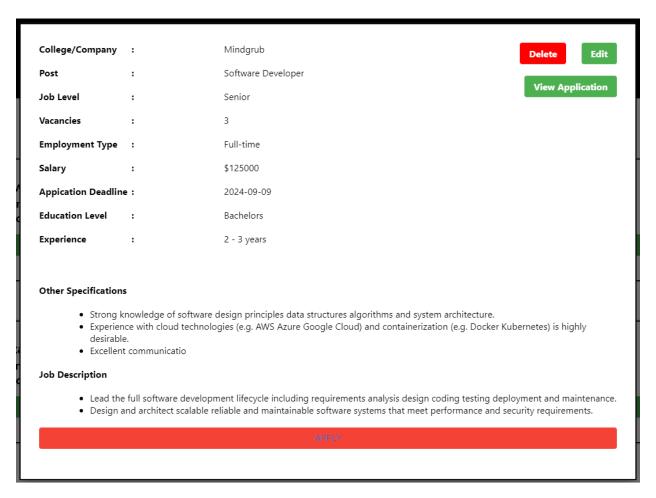
Accommodation Page



Create Event Page

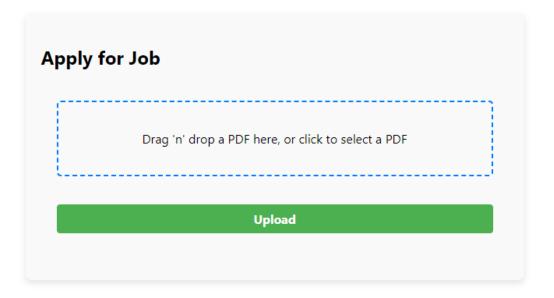


Event Detail Page



Job Detail Page

Home Events Jobs Accommodations



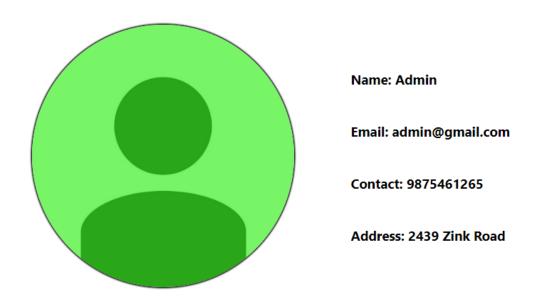
Apply Job Page

Home Events Jobs Accommodations

Contact Us		
Full Name	Fairborn, Ohio	
Email	9 876543210	
Mobile	bytecodevelocity0@gmail.com	
Message	I hope you found something that piqued your interest here. We would be very happy yo answer any questions. Do check back for future updates.	
SUBMIT		

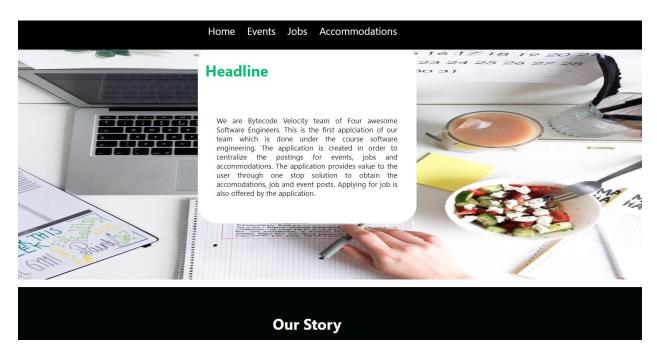
Contact us page

Home Events Jobs Accommodations





Profile View Page



About-us page

Important Code Snapshots in frontend

```
import axios from "axios";
import { useEffect } from "react";
import useAuth from "./useAuth";
const useAxiosPrivate = () => {
const { auth } = useAuth();
 useEffect(() => {
   const requestIntercept = axios.interceptors.request.use(
      (config) => {
       if (!config.headers["Authorization"]) {
         config.headers["Authorization"] = `Bearer ${auth?.token}`;
      return config;
      (error) => Promise.reject(error)
    return () => {
    axios.interceptors.request.eject(requestIntercept);
  }, [auth]);
 return axios;
export default useAxiosPrivate;
```

Central axios implementation

```
const sendEmail = (e) => {
 e.preventDefault();
 if (validation()) {
   emailjs
     .sendForm(
       "service_7chho0n",
       "template_ms7kwp8",
       form.current,
       "qolgHrZQ-8i6FyM7v"
     .then(
       (result) => {
         console.log(result.text);
         alert("SUCCESS!");
       (error) => {
         console.log(error.text);
         alert("FAILED...", error);
```

Sending contact data through email

```
import { useCallback, useState } from "react";
import React from "react";
import { useDropzone } from "react-dropzone";
import "./ImageUploader.css";
import { uploadToFirebase } from "./UploadFirebase";
const ImageUploader = ({ setParentState }) => {
 const [image, setImage] = useState(null);
 const handleSubmit = async () => {
   if (image) {
     var downloadURL = await uploadToFirebase(image);
     console.log("downloadURL: " + downloadURL);
     setParentState((prevState) => {
       return { ...prevState, imageURL: downloadURL };
 const onDrop = useCallback((acceptedFiles) => {
   const file = acceptedFiles[0];
   setImage(
     Object.assign(file, {
       preview: URL.createObjectURL(file),
 const { getRootProps, getInputProps } = useDropzone({
   onDrop,
   accept: "image/*",
   maxFiles: 1,
 const removeImage = () => {
   setImage(null);
   setParentState((prevState) => {
    return { ...prevState, imageURL: "" };
   });
  return (
   <div className="container">
```

Reusable and pluggable image upload component

```
function App() {
 return (
   <Router>
     <Navbar />
     <Routes>
       <Route path="/sign-in" element={<LoginForm />} />
       <Route path="/sign-up" element={<SignupForm />} />
       <Route element={<RequireAuth />}>
         <Route path="/home" element={<Home />} />
         <Route path="/" element={<Home />} />
         <Route path="/about" element={<About />} />
         <Route path="/contactus" element={<Contact />} />
         <Route path="/jobs" element={<Job />} />
         <Route path="/accommodations" element={<Accommodation />} />
         <Route path="/events" element={<MainI />} />
         <Route path="/jobs/CreateJobForm" element={<JobPostForm />} />
         <Route
           path="/accommodations/CreateAccommodationForm"
           element={<AccomodationPostForm />}
         <Route path="/events/CreateEventForm" element={<EventPostForm />} />
         <Route path="/userprofile" element={<UserProfile />} />
         <Route path="/updateJob/:id" element={<UpdateJob />} />
         <Route path="/updateEvent/:id" element={<UpdateEvent />} />
         <Route
           path="/updateAccommodation/:id"
           element={<UpdateAccommodation />}
       </Route>
       <Route path="/apply/:id" element={<ApplyJobs />} />
       <Route path="/viewApplication/:id" element={<ViewApplication />} />
       <Route path="*" element={<NotFoundView />} />
     </Routes>
```

Routing implementation

```
<div className="form-container">
 <h2>List a Room</h2>
 <form onSubmit={handleSubmit}>
    <ImageUploader setParentState={setFormData}></ImageUploader>
   <label htmlFor="roomType">Room Type</label>
     name="roomType"
     id="roomType"
     value={formData.roomType}
      onChange={handleChange}
     <option value="">Select a room type</option>
     <option value="Single">Single</option>
      <option value="Double">Double</option>
      <option value="Suite">Suite</option>
    <label htmlFor="rent">Rent</label>
     type="text"
     id="rent"
     name="rent"
     placeholder="Monthly rent"
     value={formData.rent}
      onChange={handleChange}
   <label htmlFor="moveIn">Move In</label>
     type="text"
     id="moveIn"
      name="moveIn"
      placeholder="Date"
     value={formData.moveIn}
      onChange={handleChange}
```

Create Accommodation Form

Important code Snapshots in Backend

Token validator function

```
const { body, validationResult } = require("express-validator");
1
     const accommodationValidator = [
         body("roomType")
           .exists()
           .withMessage("Room type is missing")
           .notEmpty()
           .withMessage("Room type is empty")
           .isString()
           .withMessage("Room type must be a string"),
         body("imageURL").isString().withMessage("imageURL name must be a string"),
         body("moveIn")
14
           .exists()
15
           .withMessage("Move-in date is missing")
16
           .notEmpty()
           .withMessage("Move-in date is empty")
18
           .matches(/^{d}_{4}-d_{2}-d_{2}, "i")
19
           .withMessage("Move-in date must be in YYYY-MM-DD format"),
20
         body("rent")
21
           .exists()
22
           .withMessage("Rent is missing")
           .notEmpty()
           .withMessage("Rent is empty")
           .isNumeric()
           .withMessage("Rent must be a number"),
         body("space").isString().withMessage("Space must be a string"),
28
         body("amenities").isString().withMessage("Amenities must be a string"),
         body("rules").isString().withMessage("Rules must be a string"),
         body("location").isString().withMessage("Location must be a string"),
       (req, res, next) => {
         const errors = validationResult(req);
         if (!errors.isEmpty()) {
           res.status(400).json({ message: "invalid payload", ...errors });
           next();
     ];
     module.exports = accommodationValidator;
```

Data validator middleware

```
const service = require("../services/job.service");
exports.createJob = async (req, res, next) => {
   const job = await service.createJob(req.body);
    res.status(201).json({
     message: "Job created successfully",
      job: job,
 } catch (error) {
   next(error);
exports.getAllJobs = async (req, res, next) => {
   const jobs = await service.getAllJobs();
  res.send(jobs);
 } catch (error) {
   next(error);
exports.getJobById = async (req, res, next) => {
 try {
  const { id } = req.params;
   const job = await service.getJobById(id);
   res.send(job);
 } catch (error) {
  next(error);
};
exports.deleteJobById = async (req, res, next) => {
try {
   const { id } = req.params;
    await service.deleteJobById(id);
   res.send({ message: "Job deleted successfully" });
  } catch (error) {
   next(error);
exports.updateJobById = async (req, res, next) => {
  try {
```

Model for job

Accommodation Routes

```
const { Events } = require("../models");
     module.exports.create = async (eventDetails) => {
         const event = await Events.create(eventDetails);
         return event;
       } catch (error) {
         throw error;
     module.exports.getAllEvents = async () => {
        const events = await Events.findAll();
14
        return events;
15
       } catch (error) {
16
       throw error;
17
18
19
20
     module.exports.getEventById = async (id) => {
21
22
         const event = await Events.findOne({
          where: { uuid: id },
24
       } catch (error) {
         throw error;
30
     module.exports.deleteEventById = async (id) => {
       try {
        const result = await Events.destroy({
         where: { uuid: id },
35
         });
36
        return result;
       } catch (error) {
38
         throw error;
40
     module.exports.updateEventById = async (id, eventDetails) => {
       try {
        const result = await Events.update(eventDetails, {
```

Event Repository